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## D. Storage of Flammable Liquids Classes IA, IB, IC

#### 1. Purpose

This Louisiana State University Operational Safety Standard establishes consistent safety practices within the Louisiana State University and Agricultural an Mechanical College for the Storage of Flammable Liquids—Classes IA, IB, and IC.

#### 2. Scope

This Safety Standard shall apply to all users of Class IA, IB, and IC Flammable Liquids in the performance of any task on University property or under the auspices of the University.

#### 3. Definitions

a. Flammable Liquid—shall mean a liquid having a flash point below 100F (37.8C), having a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100F (37.8C), and shall be known as a Class I liquid.

For the purpose of this standard, Class I liquids shall be subdivided as follows:

Class IA–shall include all liquids having flash points below 73F (22.8C) and having a boiling point below 100F (37.8C).

Class IB–shall include all liquids having flash points below 73F (22.8C) and having a boiling point at or above 100F (37.8C).

Class IC-shall include all liquids having flash points at or above 73F (22.8C) and below 100F (37.8C).

b. Combustible Liquid–shall mean a liquid having a flash point at or above 100F (37.8C).

For the purpose of this standard, Combustible Liquids shall be subdivided as follows:

Class II—shall include liquids having flash points at or above 100F (37.8C) and below 140F (60C).

Class IIIA-shall include those liquids having flash points at or above 140F (60C) and below 200F (93.4C).

Class IIIB—shall include those liquids having flash points at or above 200F (93.4C).

c. Safety Can-shall mean an approved container of not more than five gallon capacity having a spring-closing lid and spout cover and so designed that it will safety relieve internal pressure.

### 4. Standards

- a. Storage shall be limited to that required for operation of office equipment, maintenance, demonstration, treatment, and laboratory work. All liquids in laboratories and other points of use shall meet the following storage requirements:
  - i. No container for Class I or II liquids shall exceed one gallon, except safety cans, which may be of two gallon capacity.
  - ii. No more than 10 gallons of Class I and II liquids combined shall be stored outside of a storage cabinet or storage room, except in Safety Cans.
  - iii. No more than 25 gallons of Class I and II liquids combined shall be stored in Safety Cans outside of a storage room or storage cabinet.
  - iv. No more than 60 gallons of Class IIIA liquids shall be stored outside of a storage room or storage cabinet.
  - v. Quantities of liquids in excess of those set forth in this Safety Standard shall be stored in an approved inside or outside storage room.

Maximum allowable size of container:

Container	Flammable Liquids						Combustible Liquids			
	Class IA		Class IB		Class IC		Class II		Class IIIA	
	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons
Glass	0.5	0.12	1	0.25	4	1	4	1	4	1
Metal or approved plastic	4	1	20	5	20	5	20	5	20	5
Safety cans	7.5	2	20	5	20	5	20	5	20	5

Note: Class IA and Class IB liquids may be stored in glass containers of not more than 1-gallon capacity if the required liquid purity (such as ACS Analytical Reagent grade or higher) would be affected by storage in metal containers or if liquid would cause excessive corrosion of the metal container only upon written approval of the Office of Occupational and Environmental Safety.

b. Flame Proof Storage Cabinets shall be in accordance with National Fire Protection Association (NFPA) 30, Chapter 4.

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Quantity and classification of liquids which can be stored:

- i. Not more than 120 gallon of Class I, Class II, or Class IIIA liquids.
- ii. Of the above total, not more than 60 gallons may be of Class I and Class II liquids.
- iii. No more than three cabinets can be located in a single room unless every group of three is separated by 100' or more.
- c. Tank Storage—of flammable or combustible liquids, above or below ground and in any quantity, shall meet NFPA 30, Chapter 2 through Chapter 9 and all codes set forth by the local authority having jurisdiction.
- d. The Office of Environmental Health and Safety (EHS) shall be contacted when any storage tank is being considered for campus use.